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**DATE:** November 5, 2004  
**TO:** Certificates of Correction Branch  
**FROM:** W. Gary Jones  
SPE, Art Unit 1634  
**SUBJECT:** REQUEST FOR CERTIFICATE OF CORRECTION

Please issue a Certificate of Correction in U. S. Letters Patent No. 6,743,823 as specified on the attached Certificate.

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W. Gary Jones, SPE  
Art Unit 1634

# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE

Patent No. 6,743,823

Patented: 09/585077

MPEP 1480 states that The Director Of the United States Patent and Trademark Office may issue a certificate of correction pursuant to 35 U.S.C. 254 to correct a mistake in a patent, incurred through the fault of the Office, which mistake is clearly disclosed in the records of the Office:

Acting sua sponte for mistakes that the Office discovers.

In the instant Patent, it has come to the attention of the Office that the correct claims were not printed. Accordingly, it is hereby certified that the correct claims of this patent are:

1. A method of treating or preventing sub-optimal urea cycle function in a human subject having a polymorphism that results in a N→T substitution at amino acid 1405 of a carbamyl phosphate synthetase I (CPSI) polypeptide, the method comprising determining whether a human subject has said polymorphism, and, if said human subject has said polymorphism, administering to the human subject a therapeutically effective amount of a nitric oxide precursor, whereby treatment or prevention of sub-optimal urea cycle function is accomplished.
2. The method of claim 1, wherein the sub-optimal urea cycle function further comprises hyperammonemia or decreased arginine production.
3. The method of claim 1, wherein the subject is suffering from a disorder associated with impaired liver function or wherein the subject is exposed or about to be exposed to an environmental stimulus associated with impaired liver function.
4. The method of claim 3, wherein the disorder is selected from the group consisting of hepatitis, sclerosis, pulmonary hypertension, bone marrow transplant toxicity in a subject undergoing bone marrow transplant and combinations thereof.
5. The method of claim 3, wherein the environmental stimulus is selected from the group consisting of chemotherapy, cardiac surgery, increased oxidative stress, bone marrow transplant, and combinations thereof.
6. The method of claim 1, wherein the nitric oxide precursor is selected from the group consisting of citrulline, arginine and combinations thereof.
7. The method of claim 1, wherein the nitric oxide precursor is administered in a dose ranging from about 0.01 mg to about 1,000 mg.
8. The method of claim 7, wherein the nitric oxide precursor is administered in a dose ranging from about 0.5 mg to about 500 mg.
9. The method of claim 8, wherein the nitric oxide precursor is administered in a dose ranging from about 1.0 mg to about 250 mg.

10. A method of treating or preventing bone marrow transplant toxicity in a human subject undergoing bone marrow transplant, the human subject having at least one copy of a carbamyl phosphate synthetase I (CPSI) gene that encodes a threonine residue at amino acid 1405 of a CPSI polypeptide, the method comprising determining whether a human subject has at least one copy of a CPSI gene encoding a threonine residue at amino acid 1405 of a CPSI polypeptide, and, if said human subject has at least one copy of a CPSI gene encoding a threonine residue at amino acid 1405 of a CPSI polypeptide, administering to the human subject a therapeutically effective amount of a nitric oxide precursor, whereby bone marrow transplant toxicity is treated or prevented in the human subject.

11. The method of claim 10, wherein the nitric oxide precursor is selected from the group consisting of citrulline, arginine and combinations thereof.

12. The method of claim 10, wherein the nitric oxide precursor is administered in a dose ranging from about 0.01 mg to about 1,000 mg.

13. The method of claim 12, wherein the nitric oxide precursor is administered in a dose ranging from about 0.5 mg to about 500 mg.

14. The method of claim 13, wherein the nitric oxide precursor is administered in a dose ranging from about 1.0 mg to about 250 mg.

15. The method of claim 10, wherein the bone marrow transplant toxicity comprises hepatic veno-occlusive disease.

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W. Gary Jones  
Supervisory Patent Examiner  
Art Unit 1634

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,743,823 B1  
DATED : June 1, 2004  
INVENTOR(S) : Marshall Summar et.al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 137

Replace claims with the following claims.

1. A method of treating or preventing sub-optimal urea cycle function in a human subject having a polymorphism that results in a N→T substitution at amino acid 1405 of a carbamyl phosphate synthetase I (CPSI) polypeptide, the method comprising determining whether a human subject has said polymorphism, and, if said human subject has said polymorphism, administering to the human subject a therapeutically effective amount of a nitric oxide precursor, whereby treatment or prevention of sub-optimal urea cycle function is accomplished.
2. The method of claim 1, wherein the sub-optimal urea cycle function further comprises hyperammonemia or decreased arginine production.
3. The method of claim 1, wherein the subject is suffering from a disorder associated with impaired liver function or wherein the subject is exposed or about to be exposed to an environmental stimulus associated with impaired liver function.
4. The method of claim 3, wherein the disorder is selected from the group consisting of hepatitis, sclerosis, pulmonary hypertension, bone marrow transplant toxicity in a subject undergoing bone marrow transplant and combinations thereof.
5. The method of claim 3, wherein the environmental stimulus is selected from the group consisting of chemotherapy, cardiac surgery, increased oxidative stress, bone marrow transplant, and combinations thereof.
6. The method of claim 1, wherein the nitric oxide precursor is selected from the group consisting of citrulline, arginine and combinations thereof.
7. The method of claim 1, wherein the nitric oxide precursor is administered in a dose ranging from about 0.01 mg to about 1,000 mg.
8. The method of claim 7, wherein the nitric oxide precursor is administered in a dose ranging from about 0.5 mg to about 500 mg.
9. The method of claim 8, wherein the nitric oxide precursor is administered in a dose ranging from about 1.0 mg to about 250 mg.
10. A method of treating or preventing bone marrow transplant toxicity in a human subject undergoing bone marrow transplant, the human subject having at least one copy of a carbamyl phosphate synthetase I (CPSI) gene that encodes a threonine residue at amino acid 1405 of a CPSI polypeptide, the method comprising determining whether a human subject has at least one copy of a CPSI gene encoding a threonine residue at amino acid 1405 of a CPSI polypeptide, and, if said human subject has at least one copy of a CPSI gene encoding a threonine residue at amino acid 1405 of a CPSI polypeptide, administering to the human subject a therapeutically effective amount of a nitric oxide precursor, whereby bone marrow transplant toxicity is treated or prevented in the human subject.
11. The method of claim 10, wherein the nitric oxide precursor is selected from the group consisting of citrulline, arginine and combinations thereof.
12. The method of claim 10, wherein the nitric oxide precursor is administered in a dose ranging from about 0.01 mg to about 1,000 mg.
13. The method of claim 12, wherein the nitric oxide precursor is administered in a dose ranging from about 0.5 mg to about 500 mg.
14. The method of claim 13, wherein the nitric oxide precursor is administered in a dose ranging from about 1.0 mg to about 250 mg.
15. The method of claim 10, wherein the bone marrow transplant toxicity comprises hepatic veno-occlusive disease.